

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
16 June 2005 (16.06.2005)

PCT

(10) International Publication Number
WO 2005/053772 A1

(51) International Patent Classification⁷: **A61M 1/36**

(21) International Application Number:
PCT/EP2004/012372

(22) International Filing Date:
2 November 2004 (02.11.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
03026855.1 24 November 2003 (24.11.2003) EP
03026854.4 24 November 2003 (24.11.2003) EP

(71) Applicant (for all designated States except US): **GAMBRO LUNDIA AB** [SE/SE]; Magistratsvägen 16, S-22643 Lund (SE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **DANNENMAIER, Jürgen** [DE/DE]; Grünenwaldstrasse 88, D-72336 Balingen (DE). **GOEHL, Hermann** [DE/DE]; Rosengarten 2, D-72406 Bisingen (DE). **ERTL, Thomas**

[DE/DE]; Marienburgstrasse 56, D-72406 Bisingen (DE). **CHEVALLET, Jacques** [FR/FR]; 8 route de Ternay, F-69360 Serezin du Rhône (FR). **RIBOLZI, Francesco** [IT/IT]; via Camatta 1, I-41100 Modena (IT).

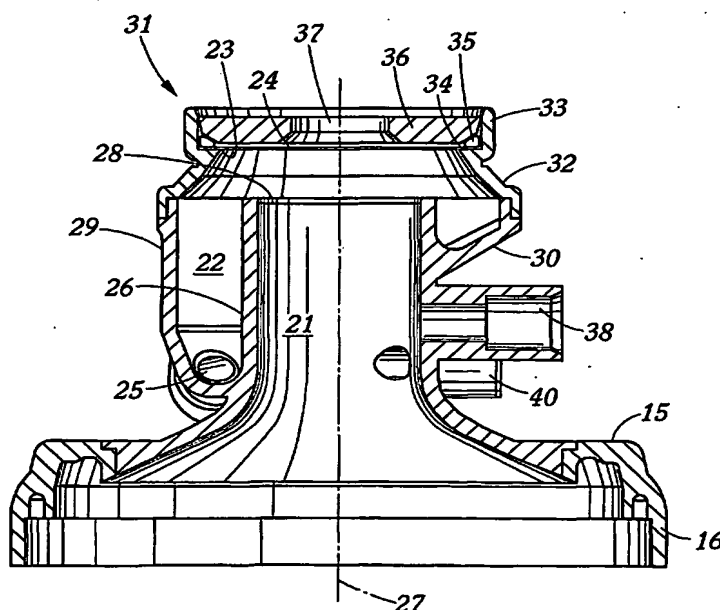
(74) Agent: **LEJEUNE, Daniel**; Gambro Patent Department, 61 avenue Tony Garnier, F-69007 Lyon (FR).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE,

[Continued on next page]

(54) Title: **DEGASSING DEVICE AND END-CAP ASSEMBLY FOR A FILTER INCLUDING SUCH A DEGASSING DEVICE**



(57) Abstract: A degassing device (203) comprises a first chamber (21) having an inlet for a liquid, and a second chamber (22) having an opening (23) closed by a hydrophobic membrane (24) and an outlet (25) for discharging the liquid. The first chamber (21) has a downstream portion that partially extends within the second chamber (22) and communicates therewith by a passageway (28). The second chamber (22) has a downstream portion that extends below the passageway (28) and asymmetrically surrounds the downstream portion of the first chamber (21).



SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ,*

BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.